Reply to Office Action of June 15, 2004

Attorney Docket No. 81784.0232 Customer No.: 26021

REMARKS/ARGUMENTS

Claims 1-19 were pending in the Application. By this Amendment, new claims 20-31 are being added to advance the prosecution of the Application. No new matter is involved.

The courtesy of a telephonic interview granted the undersigned by Examiner Jorgensen on November 15, 2004, is gratefully acknowledged. This Amendment is being filed pursuant to such interview.

In Paragraph 2 which begins on page 2 of the Office Action, claims 1 and 15-19 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,537,650 of West et al. In Paragraph 3 which begins on page 3 of the Office Action, claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over West in view of U.S. Patent 4,544,912 of Iwamoto et al. In Paragraph 4 which begins on page 4 of the Office Action, claims 2, 3, 9 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over West, or over West in view of Iwamoto, and further in view of U.S. Patent 6,087,816 of Volk and U.S. Patent 4,347,474 of Brooks et al. In Paragraph 5 which begins on page 7 of the Office Action, claims 4, 5, 11 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over West or over West in view of Iwamoto, and further in view of U.S. Patent 6,323,851 of Nakanishi. In Paragraph 6 which begins on page 10 of the Office Action, claims 6, 7, 13 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over West in view of Nakanishi or over West in view of Iwamoto and further in view of Nakanishi, and further in view of U.S. Patent 5,155,840 of Niijima. These rejections are respectfully traversed.

In the "Response to Arguments" section which begins on page 13 of the Office Action of June 15, 2004, it is stated that the critical issue is whether Applicants' claim as amended overcomes the teaching of West. West is said to teach blanking

Appl. No. 09/823,927 Amdt. Dated December 7, 2004 Reply to Office Action of June 15, 2004 Attorney Docket No. 81784.0232 Customer No.: 26021

periods when no pixel data is presented on the display. Because these periods are so short, the viewer does not see a blank screen during the blanking period. It is further said that West teaches that the power to the DAC is turned off. West is said to teach a power system that provides a voltage that is at a traditional level during the non-blanking periods and at an essentially zero level during the blanking periods.

As discussed during the telephonic interview with the Examiner on November 15, 2004, Applicants agree with this characterization of West. However, Applicants do not agree with the statement at the very end of Paragraph 7 of the Office Action that the voltage in West allows the digital-to-analog converter circuit and the analog signal processing circuit to operate during blanking intervals. In West, the digital-to-analog converter (DAC) cannot perform the conversion operation during the blanking intervals. In spite of what is said in the Office Action, it is common knowledge in the field that a DAC cannot operate when no power is supplied. This is because, although the voltage selection switch for analog output may operate by the supplied digital data, no analog signal is output when the supply voltage is zero (that is, the analog signal remains at zero). While it may be that the voltage selection switch may operate when the supply voltage is zero, it is not true that the device is operable (in particular, regarding the conversion operation) when there is no output.

Consequently, the language in claim 1 "allows said digital-to-analog converter circuit and said analog signal processing circuit to operate, when a predetermined power save is instructed" is not shown or suggested by West. Similar comments apply to independent claims 15, 16 and 18 which contain similar limitations. During the interview, the Examiner acknowledged that the

independent claims distinguish over West in this respect, but stated that he needed additional time to study and consider the claims.

During the interview, the undersigned proposed further claim language which is submitted to even further distinguish the claims over West. The Examiner acknowledged that such language further distinguishes over the reference, and suggested that such language be incorporated into additional dependent claims in order that the Examiner may give further consideration to the independent claims in their present form.

Therefore, Applicants are adding new claims 20-31 so as to depend from various ones of independent claims 1, 15, 16 and 18.

New claim 20 depends from and further defines claim 1 by reciting "wherein the power supply circuit reduces the supply voltage supplied from the supply voltage during the normal operation to a reduced voltage which is less than the supply voltage during the normal operation but greater than zero and which still allows said digital-to-analog converter circuit and said analog signal processing circuit to operate, when a predetermined power save is instructed". Such language emphasizes the difference over West that when a power save is instructed, the supply voltage is reduced to a reduced voltage which is less than the supply voltage during the normal operation but greater than zero and which still allows said digital-to-analog converter circuit and said analog signal processing circuit to operate.

New claims 21, 22 and 23 depend from and add similar limitations to independent claims 15, 16 and 18 respectively.

New claim 24 depends from and further defines claim 1 by reciting "wherein a period in which said power save is instructed and said supply voltage is reduced includes a period in which display data is written to said display region and a display is realized". In West, because the various parts of the circuit including the digital-to-analog converter circuit and the analog signal processing circuit do not operate during the blanking intervals, display data is not written to the display region. Therefore, claim 24 is submitted to clearly distinguish patentably over West.

Similar comments apply to new claims 25-27 which depend from and add similar limitations to independent claims 15, 16 and 18 respectively.

New claim 28 depends from and further defines claim 1 by reciting "wherein during a period in which said power save is instructed and said supply voltage is reduced, said digital-to-analog converter circuit outputs an analog signal corresponding to a digital signal". This emphasizes that during power save, the digital-to-analog converter circuit still functions to output an analog signal corresponding to a digital signal. As noted above, the DAC of West does not operate during the blanking intervals. Therefore, claim 28 is submitted to clearly distinguish patentably over such reference.

Similar comments apply to new claims 29-31 which depend from and add similar limitations to independent claims 15, 16 and 18, respectively.

Again, pursuant to the telephonic interview of the undersigned with the Examiner, the arguments and the points discussed during the telephonic interview are made herein, and the proposed claim language has been submitted in dependent form as suggested by the Examiner.

In conclusion, claims 1-31 are submitted to clearly distinguish patentably over the prior art for the reasons discussed above. Therefore, reconsideration and allowance are respectfully requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los

Appl. No. 09/823,927 Amdt. Dated December 7, 2004 Reply to Office Action of June 15, 2004 Attorney Docket No. 81784.0232 Customer No.: 26021

Angeles, California telephone number (213) 337-6846 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Bv:

Respectfully submitted,

HOGAN & HARTSON L.L.P.

Date: December 7, 2004

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